## Critical care delivery plan – Burns appendix February 2015

## Introduction

The National Burn Care Review (NBCR) in 2001 (<u>http://www.nbcg.nhs.uk/national-burn-care-review</u>), produced by the British Burn Association and supported by the Department of Health, identified some significant short-comings in burn care provision and the resultant need to improve and standardise services as well as achieving equity of access to, and quality of, burn care across England and Wales. The recommendations from this review were later formally developed into a set of National Burn Care Standards.

## **Stratification of Burn Care Services**

Central to the standards is the burn care network, co-ordinating services providing different levels of care. Specialised burn care services are divided into three increasing levels of care. Services may provide burn care to the following levels regardless of whether the service is provided for adults and children.

- 1. Burn Facilities to treat less serious injuries
- 2. Burn Units for moderate non-complex burn injuries
- 3. Burns Centres to treat the most serious (complex) burn injuries

Each service is clinically led by plastic surgeons specialising in burn care, burns anaesthetists/intensivists, nursing staff and therapists trained in burn care, covering the whole pathway of care from injury to final discharge following rehabilitation and surgical reconstruction. Initial assessment of burns within Emergency Departments (EDs) and the treatment of minor burns with local hospitals and primary care are not included within the definition of specialised burn care (National Specialised Services Definition Set 0.9 Burn Care Services all ages), however education and recommendations for initial management and referral are the responsibility of the burn care network. Responsibility for ensuring that these patients receive high quality care and that they are referred on to specialised Burn providers in a consistent timely manner and compliance with the national referral guidelines is within the Burn care network's remit.

**Burn injury:** A burn is an injury in which skin loss occurs due to heat, cold, electricity, chemicals, light, radiation or friction. Causation rates vary depending on the age of the patient. 55% of burn injuries in children, for

example, are scalds usually caused by hot water. Outcome is dependent upon the size and depth of the burn injury, the age of the patient, the presence of inhalational injuries and whether they have any other illnesses or conditions. The time that elapses between injury and initial treatment will also affect prognosis. As well as physical complications, burn injuries may result in psychological and emotional distress due to scarring, deformity, appearance change and the trauma of the event that caused the initial injury.

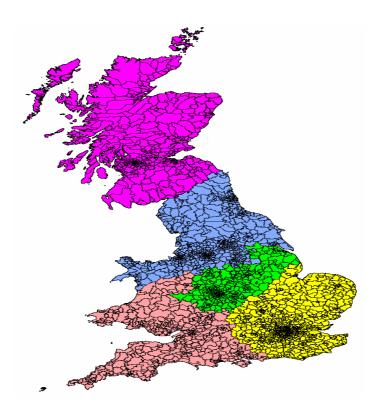
**Patient Pathway:** The patient pathway will vary depending upon the severity and nature of the burn injury, the age of the patient, the presence of other injuries and any social or child safeguarding concerns. The majority of patients will first attend Emergency Departments, Minor Injuries Units (MIUs) or more rarely GP practices where minor injuries can safely be treated. However, following assessment, a patient with a more serious burn would be transferred to the nearest specialised burn service able to meet their needs. This transfer would take place by the patient's own means, ambulance or helicopter depending on the condition of the patient and the length of the journey. Initial transfer of the patient with burns remains the responsibility of the referring service in the interests of a timely transfer, although rarely, certain severely ill children will require retrieval by a specialised paediatric intensive care team. National Referral guidance thresholds and transfer arrangements were agreed by the Burn Care Service providers within the Networks in 2012.

## Description of the South West UK (SWUK) Burn Care Network

The SWUK Burn Care Network was formally established in January 2006 but the clinical relationships and collaboration between the service providers has a much longer history. The role of the burn care network is to enhance and standardise the delivery of care to adult and paediatric patients who have suffered a burn injury or a skin loss condition. It aims to fulfill the principles outlined in the National Burn Care Review and to achieve the standards for burn care set out in that document.

The SWUK Burn Care Network has a population of approximately 10 million, serving the South West of England, parts of South Central England and South, Mid and West Wales.

Figure 1: Map of the Burn Care Networks in England, Scotland and Wales



**Burn Service Providers:** There are four designated burn service providers within the South West UK Burn Care Network. The four designated providers are:

- 1. Salisbury NHS Foundation Trust Salisbury District General Hospital
- 2. North Bristol NHS Trust Southmead Hospital, and University Hospitals Bristol NHS Foundation Trust - Bristol Royal Hospital for Sick Children
- 3. Abertawe and Bro Morgannwg University Health Board Morriston Hospital, Swansea
- 4. Plymouth Hospitals NHS Trust

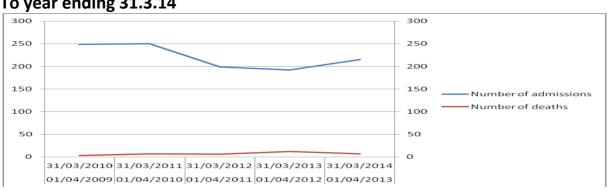
## **Designation of Service Providers in SWUK Burn Care Network**

The designation process came into effect on 1<sup>st</sup> April 2010, except for Plymouth Hospitals NHS Trust which was designated from May 17<sup>th</sup> 2010. A review of progress at Plymouth was undertaken in January 2011, to ensure that factors highlighted during the designation process had been resolved and to identify any support required by the service. This review concluded that the service had developed well and that its new multidisciplinary team meetings had been effectively established.

Burn Care Provider	e Service	Description of Clinical Activity	Designation
Morriston Swansea	Hospital,	Adults burns treating any severity including the most complex Children with Minor and Moderate Burns	•
Bristol Hospital	Children's	Children burns treating any severity including the most complex	
Southmead Bristol	Hospital,	Adults With Minor and moderate burns (non complex)	•
Salisbury General Salisbury	District Hospital,		•
Derriford Plymouth	Hospital,	Adults and children with minor burn injuries (non complex)	17 <sup>th</sup> May 2010 Facility

 Table 1: Designated Providers of Burn Care in the Network

## The Burns Service- Morriston Hospital Swansea



Activity To year ending 31.3.14

Please note, the small increase in mortality over the 2012-13 period also coincides with an increase in average Baux and Belgium scores (measures of injury severity).

#### **Delayed transfers of care**

Auditing of DTOC has been commenced and has now been in place since September 2014. Annual figures therefore not yet available (for inclusion in next update). However, preliminary results suggest that there is only a problem with DTOC to the adult ward. This was initially due to lack of cubicle space for patients with multi resistant infections, but more recently due to utilisation of beds on Powys ward by non burned patients. No recorded DTOC to the paediatric ward.

#### **Premature discharges**

Defined by unplanned readmissions within 48 hours of discharge from burns ITU



To year ending 31.3.14

## Summary of the priorities to 2016

### Delivering appropriate effective ward based care - The right patient

The priorities are:

- Ensure all acute admissions to hospital are reviewed by a consultant within 12 hours. We are currently compliant with this for all level 3 patients, but the maximum time for level 2 and below remains at 14 hours.
- Burns ITU is a multidisciplinary service. We consider it essential that level 3 patients are reviewed by both burn surgeon and burn intensivist/anaesthetist within 12 hours of admission.

We are currently compliant with this and will continue to audit.

• Continue to audit documentation of DNACPR and treatment limitation plans.

# Timely admission to burns ITU - The right patient receiving the right care at the right time

The priorities are:

- Utilise burns ITU facilities for patients requiring burns critical care or burns high dependency care only.
- Burn injured patients are relatively stable in the first few hours following injury and therefore the earlier the transfer to definitive care takes place, the better it is for the patient. The SWUK burns ODN considers retrieval of burn injured patients by a burns retrieval team unnecessary and potentially detrimental due to delays in transfer.

## Effective burns critical care provision and utilisation -The right care

The priorities are:

- To ensure that critically injured burns patients continue to be managed by dedicated burns surgeons and burns anaesthesia/intensive care specialists.
- At present the anaesthetists (both consultants and middle grades) also have responsibility for emergency plastic surgery out of hours. We must ensure that the burns service always takes priority.
- Access to all members of the burns MDT at the appropriate times in the patient pathway
- Improved access to speech and language therapy services required.
- Improved access to specialist pharmacy services required
- Improved access to training for nursing staff, to attain specialist qualifications in critical care nursing
- Improved access to NVQ training for healthcare support workers.

# Timely discharge from burns ITU - The right patient receiving the right care at the right time

The priorities are:

- To continue to audit DTOC of patients from Tempest burns ITU to Powys ward (adult low dependency burn ward).
- There have been no DTOC to the Dyfed ward (paediatric low dependency burn ward) during the period of audit.
- Discharge co-ordinator required every day.

## Improving information and research

The priorities are:

- To continue to participate in the national burns injury database (iBid)
- To participate in ICNARC: business case required and in progress.